



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**RBE105-14181W4-17**  
**Job Sheet 188793**



Part No: RBE105-14181W4-17

Job Qty: ~~2~~ <sup>5</sup> pcs

Part Name: Clamping Ring



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/15/19

Job Tracking No:

Due Date: 2/8/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBE105-14181W4 Rev. B IPP Rev. A 19.01.11 New issue DP Verify DD

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation      | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier | Sign-off |
|-------|----------------|-------|------------|----------|-----------|---------|---------------------|----------|
|       |                |       |            |          | Setup Hrs | Run Hrs |                     |          |
| 100   | NLX 2500SY - 1 | 2 pcs | 2/8/19     | 2/8/19   | 0.00      | 2.67    | NLX 2500SY - 1      |          |
| 110   | QC 2           | 2 pcs | 2/8/19     | 2/8/19   | 0.00      | 0.00    | QC 2 - 1            |          |
|       |                |       |            |          |           |         | QC 2 - 12           |          |
|       |                |       |            |          |           |         | QC 2 - 14           |          |
|       |                |       |            |          |           |         | QC 2 - 17           |          |
|       |                |       |            |          |           |         | QC 2 - 19           |          |
|       |                |       |            |          |           |         | QC 2 - 2            |          |
|       |                |       |            |          |           |         | QC 2 - 20           |          |
|       |                |       |            |          |           |         | QC 2 - 22           |          |
|       |                |       |            |          |           |         | QC 2 - 23           |          |
|       |                |       |            |          |           |         | QC 2 - 25           |          |
|       |                |       |            |          |           |         | QC 2 - 32           |          |
|       |                |       |            |          |           |         | QC 2 - 33           |          |
|       |                |       |            |          |           |         | QC 2 - 35           |          |
|       |                |       |            |          |           |         | QC 2 - 38           |          |
|       |                |       |            |          |           |         | QC 2 - 39           |          |
|       |                |       |            |          |           |         | QC 2 - 4            |          |
|       |                |       |            |          |           |         | QC 2 - 40           |          |
|       |                |       |            |          |           |         | QC 2 - 44           |          |
|       |                |       |            |          |           |         | QC 2 - 45           |          |
|       |                |       |            |          |           |         | QC 2 - 48           |          |
|       |                |       |            |          |           |         | QC 2 - 49           |          |
|       |                |       |            |          |           |         | QC 2 - 50           |          |
|       |                |       |            |          |           |         | QC 2 - 51           |          |
|       |                |       |            |          |           |         | QC 2 - 52           |          |
|       |                |       |            |          |           |         | QC 2 - 54           |          |
|       |                |       |            |          |           |         | QC 2 - 56           |          |
|       |                |       |            |          |           |         | QC 2 - 57           |          |
|       |                |       |            |          |           |         | QC 2 - 62           |          |
|       |                |       |            |          |           |         | QC 2 - 63           |          |
|       |                |       |            |          |           |         | QC 2 - 8            |          |
| 120   | QC 8           | 2 pcs | 2/8/19     | 2/8/19   | 0.00      | 0.00    | QC 8 - 12           |          |



Container No: S172900



Part: RBE105 - 14181W4 - 17

Job No: 188793

Serial No/Batch: S172900

Revision: B

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Date: 04/16/19



Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                      |  |                        |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | MRB (QSI042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | QC / QA Coordinator    |  |
| <b>Root Cause</b><br><br><div style="display: flex;"> <div style="flex: 1;">           Operator <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Presservation <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Human Factors <input type="checkbox"/> </div> <div style="flex: 1;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="flex: 1;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="flex: 1;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |

|     |                               |       |        |           |                        |
|-----|-------------------------------|-------|--------|-----------|------------------------|
|     |                               |       |        | QC 8 - 14 |                        |
|     |                               |       |        | QC 8 - 17 |                        |
|     |                               |       |        | QC 8 - 20 |                        |
|     |                               |       |        | QC 8 - 25 |                        |
|     |                               |       |        | QC 8 - 3  |                        |
|     |                               |       |        | QC 8 - 32 |                        |
|     |                               |       |        | QC 8 - 33 |                        |
|     |                               |       |        | QC 8 - 35 |                        |
|     |                               |       |        | QC 8 - 38 |                        |
|     |                               |       |        | QC 8 - 39 |                        |
|     |                               |       |        | QC 8 - 4  |                        |
|     |                               |       |        | QC 8 - 44 |                        |
|     |                               |       |        | QC 8 - 45 |                        |
|     |                               |       |        | QC 8 - 49 |                        |
|     |                               |       |        | QC 8 - 58 |                        |
|     |                               |       |        | QC 8 - 8  |                        |
|     |                               |       |        | QC 8 - 9  |                        |
|     |                               |       |        | QC 8 - 68 |                        |
| 130 | Outsource - 13 - Zinc Plating | 2 pcs | 2/8/19 | GRO002-VC |                        |
| 140 | Packaging 2-1 - Receive - B4B | 2 pcs | 2/8/19 | 0.00 0.00 | Packaging 2 - 1 - B4B  |
|     |                               |       |        |           | Packaging 2 - 2 - B4B  |
|     |                               |       |        |           | Packaging 2 - 3 - B4B  |
|     |                               |       |        |           | Packaging 2 - 5 - B4B  |
|     |                               |       |        |           | Packaging 2 - 4 - B4B  |
|     |                               |       |        |           | Packaging 2 - 6 - B4B  |
|     |                               |       |        |           | Packaging 2 - 7 - B4B  |
|     |                               |       |        |           | Packaging 2 - 8 - B4B  |
|     |                               |       |        |           | Packaging 2 - 9 - B4B  |
|     |                               |       |        |           | Packaging 2 - 10 - B4B |
|     |                               |       |        |           | Packaging 2 - 11 - B4B |
|     |                               |       |        |           | Packaging 2 - 12 - B4B |
|     |                               |       |        |           | Packaging 2 - 13 - B4B |
|     |                               |       |        |           | Packaging 2 - 14 - B4B |
|     |                               |       |        |           | Packaging 2 - 15 - B4B |
|     |                               |       |        |           | Packaging 2 - 16 - B4B |
|     |                               |       |        |           | Packaging 2 - 17 - B4B |
|     |                               |       |        |           | Packaging 2 - 18 - B4B |
|     |                               |       |        |           | Packaging 2 - 19 - B4B |
|     |                               |       |        |           | Packaging 2 - 20 - B4B |
|     |                               |       |        |           | Packaging 2 - 21 - B4B |
|     |                               |       |        |           | Packaging 2 - 22 - B4B |
|     |                               |       |        |           | Packaging 2 - 23 - B4B |
|     |                               |       |        |           | Packaging 2 - 24 - B4B |
|     |                               |       |        |           | Packaging 2 - 25 - B4B |
|     |                               |       |        |           | Packaging 2 - 26 - B4B |
| 150 | QC 6                          | 2 pcs | 2/8/19 | 0.00 0.00 | QC 6 - 38              |
|     |                               |       |        |           | QC 6 - 42              |
|     |                               |       |        |           | QC 6 - 9               |
|     |                               |       |        |           | QC 6 - 68              |
|     |                               |       |        |           | QC 6 - 61              |
| 160 | Packaging 3-1 - Stock - B4B   | 2 pcs | 2/8/19 | 0.00 0.00 | Packaging 3 - 1 - B4B  |
|     |                               |       |        |           | Packaging 3 - 2 - B4B  |
|     |                               |       |        |           | Packaging 3 - 3 - B4B  |
|     |                               |       |        |           | Packaging 3 - 4 - B4B  |
|     |                               |       |        |           | Packaging 3 - 5 - B4B  |
|     |                               |       |        |           | Packaging 3 - 6 - B4B  |
|     |                               |       |        |           | Packaging 3 - 7 - B4B  |
|     |                               |       |        |           | Packaging 3 - 8 - B4B  |
|     |                               |       |        |           | Packaging 3 - 9 - B4B  |
|     |                               |       |        |           | Packaging 3 - 10 - B4B |

D. 19-04-16

04/18/2019 PL

5 pcs

APR 23 2019

DAS  
APR 30 2019 68  
9-89

DAS  
28  
9-89  
DAS  
28  
9-89



Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                      |  |                        |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | MRB (QSI042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | QC / QA Coordinator    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
| <b>Root Cause</b><br><br><div style="display: flex;"> <div style="flex: 1;">           Operator <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Presservation <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Human Factors <input type="checkbox"/> </div> <div style="flex: 1;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="flex: 1;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="flex: 1;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
|                                                                                                                                                                                                                                                                                                                  |                                     |                   |                    | Packaging 3 - 11 - B4B<br>Packaging 3 - 12 - B4B<br>Packaging 3 - 13 - B4B<br>Packaging 3 - 14 - B4B<br>Packaging 3 - 15 - B4B<br>Packaging 3 - 16 - B4B<br>Packaging 3 - 17 - B4B<br>Packaging 3 - 18 - B4B<br>Packaging 3 - 19 - B4B<br>Packaging 3 - 20 - B4B<br>Packaging 3 - 21 - B4B<br>Packaging 3 - 22 - B4B<br>Packaging 3 - 23 - B4B<br>Packaging 3 - 24 - B4B<br>Packaging 3 - 25 - B4B<br>Packaging 3 - 26 - B4B |                               |
| 170 QC 21 - SA                                                                                                                                                                                                                                                                                                   | 2 pcs                               | 2/8/19            | 0.00 0.00          | QC 21 - SA - 21                                                                                                                                                                                                                                                                                                                                                                                                              | DAS<br>21<br>9-20 MAY 02 2019 |
| Part Op 100 - 1-Machine as per folio FC <u>624</u> FOLIO REV: <u>AA</u> DWG REV: <u>B</u> 2-Deburr<br>Descriptions: 130 - Issue P/O: <u>044250</u> -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of<br>Conformity is required<br>140 - Certificate of Conformity is required |                                     |                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| <b>Job BOM</b>                                                                                                                                                                                                                                                                                                   |                                     |                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| <b>Part / Item</b>                                                                                                                                                                                                                                                                                               | <b>Component Name</b>               | <b>Quantity</b>   | <b>Operation</b>   | <b>Container</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                               |
| MT-4140QT-R6.500                                                                                                                                                                                                                                                                                                 | AISI 4140 Q&T Round Bar 6.500" Dia. | .1600 ft (.08 ea) | 100-NLX 2500SY - 1 | 5125700                                                                                                                                                                                                                                                                                                                                                                                                                      |                               |
| <b>Job Allocations</b>                                                                                                                                                                                                                                                                                           |                                     |                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| <b>Operation</b>                                                                                                                                                                                                                                                                                                 | <b>Component Part</b>               | <b>Required</b>   | <b>Inventory</b>   | <b>Allocated</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                               |
| 100-NLX 2500SY - 1                                                                                                                                                                                                                                                                                               | MT-4140QT-R6.500                    | 0                 | 3                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                            |                               |
| <b>Part Specifications</b>                                                                                                                                                                                                                                                                                       |                                     |                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| Specifications could not be found.                                                                                                                                                                                                                                                                               |                                     |                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |



Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

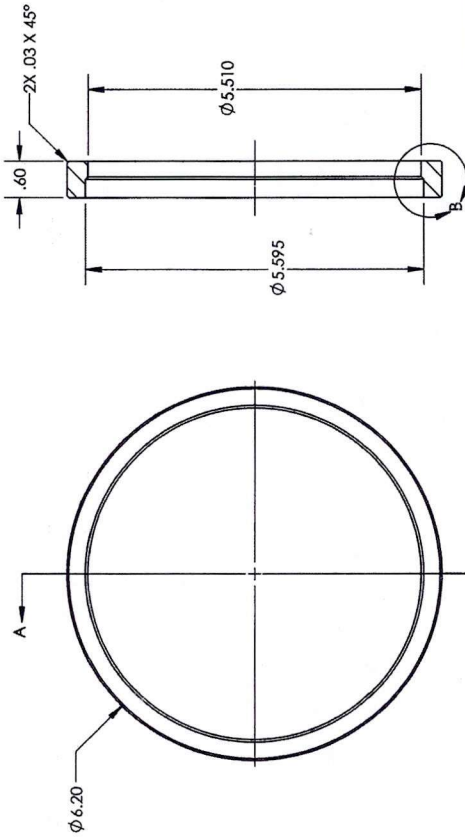
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                        |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sequence #: _____                                                                                                                 | QTY Affected : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | MRB (QSI042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | QC / QA Coordinator    |  |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column; align-items: flex-start;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Preservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |



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| REVISIONS |     |      |         |
|-----------|-----|------|---------|
| REV       | ECR | DATE | INITIAL |
|           |     |      |         |
|           |     |      |         |

DESCRIPTION



|                   |  |                            |  |                                       |  |
|-------------------|--|----------------------------|--|---------------------------------------|--|
| TITLE             |  | DRAWING NO.                |  | REV                                   |  |
| DART<br>AEROSPACE |  | RBE105-14181W4-17          |  | B                                     |  |
| MATERIAL          |  | UNLESS OTHERWISE SPECIFIED |  | DIMENSIONS ARE IN INCHES              |  |
| FINISH            |  | ZINC PLATE                 |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  |
| SPEC              |  | ASTM B633 TYPE I SC 2      |  | ANGLES 45°                            |  |
| DRAWN BY          |  | CLOUGH                     |  | SURFACES ±.02                         |  |
| CHECKED           |  | DUERFELDT                  |  | 1.8944 ALL SHARP EDGES                |  |
| APPROVED          |  | ANDERSON                   |  | OVERSIZING DIMENSIONS APPLY           |  |
| CA APPR           |  | LINDSAY                    |  | 2. AFTER PLATING                      |  |
| APPROVED          |  | PK                         |  | 3. INTERFERING AND TOL PER            |  |
| SCALE             |  | 1:2                        |  | 4. UNLESS OTHERWISE SPECIFIED         |  |
| DATE              |  | 12/24/2015                 |  | 5. USED ON MODEL                      |  |
| SHEET             |  | 10 OF 10                   |  | EC145                                 |  |

CLAMPING RING

(17)

DAS  
45  
19-2-13  
9-89





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## PO043250



**Supplier:** GRO002-VC  
Group Altech  
2455 Halpern  
St Laurent  
QC  
H4S 1N9 Canada  
Phone: 514-335-3666  
Fax: 514-335-3868

**Attention:** Grenon, Sylvie

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** PO043250

**PO Date:** 4/18/19

**Due Date:** 4/26/19

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Phone:

**Via:** Ground

**Pynt Terms:** Net 60

**Freight Terms:**

**Special Comments:**

### Items

| Line Item | Job    | Part              | Description                                                                                                                                              | Status         | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|-----------|--------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------|----------|----------------|-------------------|---------|------------------|----------------|
| 1         | 188793 | RBE105-14181W4-17 | Clamping Ring<br>-Issue P/O ;<br>-Zinc plate, ASTM B633<br>TYPE 1 SC2<br>-Color; Clear<br>-Material type; 4140<br>-Certificate of Conformity is required | Firmed -<br>X5 |         | 4/26/19  | 5 pcs          | 0 pcs             | 5 pcs   | \$18.00/pcs      | \$90.00        |

**Grand Total:** \$90.00

### Order Notes

Procurement Quality Clauses  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

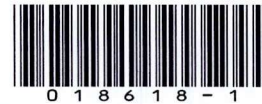
A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 4/22/19 11:29 AM dart.Lussier.Patrick



## Certificat de Conformité / Certificate of Compliance



0 1 8 6 1 8 - 1

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9  
Tel: 514-335-3666 Fax: 514-335-3868  
www.groupaltech.com

## Bon de Livraison / Packing Slip

018618- 1

Livré à / Ship to

**DART AEROSPACE LTD**  
1270 ABERDEEN STREET  
HAWKESBURY, ON, K6A1K7  
CANADA  
Tel.: 613-632-5200 Fax.:

Client / Customer:

**DART AEROSPACE LTD**  
1270 ABERDEEN STREET  
HAWKESBURY, ON, K6A1K7  
CANADA  
BUYER:

| Date expédition<br>Ship date |                                                                            | Créé Par<br>Generated By                                                            | Transport / No de Compte<br>Courier / Acc. No. | Bon de commande Client<br>Customer Purchase Order No. |                 |                   |               |                        |
|------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------|-----------------|-------------------|---------------|------------------------|
| 22-Apr-2019                  |                                                                            | SVETLANA DORZHIYEVA                                                                 |                                                | PO043250                                              |                 |                   |               |                        |
| #Ligne<br>Line#              | No. de Série / # Pièce<br>Part Number / Line Item Details<br>Job # / Ref # | Description pièce(s)                                                                | CATG.<br>U/M                                   | Comm.<br>/Ordered                                     | Exp/<br>Shipped | Qté NC/<br>NC Qty | Qté<br>Scrap/ | À venir/<br>Back Order |
| 1                            | RBE105-14181W4-17<br>Rev.                                                  | RBE105-14181W4-17<br>01 -ZINC-CLEAR SST [ZINC CLEAR ON SST]<br>ASTM B633 TYPE 1 SC2 | ZINC<br>CH                                     | 5                                                     | 5               | 0                 | 0             | 0                      |

## Notes Additionnelles / Additional Notes

1 sm box

Epaisseur réelle  
Actual Thickness

Inspecteur Qualité  
Quality Inspector

Réçu par  
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.  
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.  
Our financial and legal responsibility will not be higher than the amount of invoice.